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INK JET HEAD

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ABSTRACT

PURPOSE: To obtain such ink jet head as is ready for multinozzle dense array through making the ink attracted to electrode available in particle with the air current by arranging ink discharge port and air passage in the space between ink chamber and needle electrode which are provided oppositely.

CONSTITUTION: A multitude of ink discharge ports 2(sub 1), 2(sub 2)... are provided on an insulator body member 1 at regular intervals. Holes 3(sub 1), 3(sub 2)... continuing to these discharge ports 2(sub 1), 2(sub 2)... are kept through to an air passage 4 and allow the air current with a constant pressure to pass at all times through pipe 5. Where voltage is impressed between an conductive wall 8 and needle electrodes 9(sub 1), 9(sub 2)...., ink is attracted to the electrodes 9(sub 1), 9(sub 2)... and goes out into the holes 3(sub 1), 3(sub 2)... through ink feed ports 6(sub 1), 6(sub 2).... From impressing pulsating voltage between the wall 8 and the electrode 9, a charged ink particle is brought forth in the hole 3, which goes out of the discharge port 2 through the air current and thus comes into collision with the surface of recording paper 12. EFFECT: Density of the picture element can be kept high, and a gutter is not particularly required.